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LETTER REGARDING RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL
MANAGEMENT COMMENTS ON U S NAVY RESPONSES TO COMMENTS ON FEASIBILITY
STUDY ADDENDUM FOR SITE 16 ON NCBC DAVISVILLE RI
7/12/2013
RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT



RHODE ISLAND

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-222-4462

12 July 2013

Mr. Jeffrey Dale, RPM
U.S. Department of the Navy
BRAC PMO, Northeast
4911 South Broad Street
Building 679, PNBC
Philadelphia, PA 19112

RE: NCBC Site 16 Feasibility Study Addendum
Navy Response to RIDEM 17 April 2013 Comments
Davisville, Rhode Island
Submitted 26 June 2013, Dated 26 June 2013

Dear Mr. Dale:

The Rhode Island Department of Environmental Management, Office of Waste Management (RIDEM) has reviewed the above referenced document and comments are presented below:

1. Page 3-1, Section 3.1.1, Soil Alternative S-3A, Description, Component 1: Excavation, Paragraph 2 – This paragraph notes that shoring of Building E-107 may be necessary due to the close proximity of the building to the excavation and therefore concern for occupation of the building during said excavation activities. The Navy is proposing to excavate the top two feet of soil. Assuming the construction of the building followed some semblance of the building code there should be a minimum 42" deep footing to get below the frost line. This would negate the need for any shoring. Perhaps the Navy can send someone out to Building E-107 to dig a hole by the foundation to see if the footing goes at least two feet below ground surface. The concern is that we are unnecessarily alarming users of the site. Please remove this concern from the paragraph unless it can be substantiated.

Navy Response to RIDEM Comment No. 1: The text that describes the shoring is identical to the text for Alternative S-3. If shoring turns out to be unnecessary, then one aspect of the project will be simpler. In the meantime, identifying that shoring may be needed acknowledges a situation that may need to be addressed. Such acknowledgment should not cause any alarm. A preliminary review of construction drawings indicates the building slab does not have foundations; however, the Navy

plans to conduct an evaluation of the slab and foundation as part of the Remedial Design.

RIDEM Comment – Navy response is acceptable.

Shoring for the excavation, however, could be required depending upon how the Navy addresses exceedances of RIDEM GB TPH Leachability Criteria of 2500 ppm. There are two locations where this criteria are exceeded: 4400 ppm @ SB16-094 at a depth of 5' to 7' bgs and 5100 ppm @ 28-SB-P45 at an unknown depth. There is one other location, TP16-01 from 5' to 9' bgs at 1500ppm which exceeds the GA Leachability Criteria of 1000 ppm. The Navy may choose to either excavate the contaminated soil or develop a PRG to monitor for TPH in groundwater.

Navy Response to RIDEM Comment No. 1, continued: TPH remediation that is not co-located with CERCLA contaminants will be addressed in separate correspondence. The Navy understands its options and plans to monitor TPH in the groundwater. Also, per the historical documentation for Site 16, location 28-SB-P45 appears to have been excavated during a removal action.

RIDEM Comment – Navy response is acceptable.

2. Page 3-2, Section 3.1.1, Soil Alternative S-3A, Description, Component 3: Designation of Waste Management Area – Based on Figure 3-2, the northern portion of the waste management area (WMA) abuts the shoreline of Allen Harbor. Groundwater flow direction is from the WMA to Allen Harbor. This northern boundary needs to be moved south far enough to allow for the monitoring of groundwater leaving the WMA, but prior to entering Allen Harbor to ensure there is no adverse affect, i.e. exceedances of PRGs, from the groundwater on Allen Harbor.

NAVY Response to RIDEM Comment No. 2: The edge of the WMA does not need to be moved. The results from the wells along the shoreline will be sufficient to determine if contaminants will migrate beyond the WMA boundary.

RIDEM Comment – Navy response is acceptable.

3. Table 3-1, Federal and State Chemical Specific ARARs – Please remove the Citation DEM-DSR-01-93, Section 3.39. At our 28 March 2013 BCT meeting RIDEM agreed to allow the Navy to call the recreational land use at the marina “restricted recreational” to clarify that land use at the marina would be restricted to recreational use and that no residential use could take place on the marina property even though the remedial standards for recreational use are the same as the residential standards. Section 3.39 of the RIDEM Remediation Regulations, Amended November 2011 does not apply to this site. It would be more appropriate to cite Section 3.62(a) of the RIDEM Remediation Regulations for the reasons cited in our 26 March 2013 comment #1 to the Navy on the NCBC Site 16 Proposed

Plan. Please include DEM-DSR-01-93 Section 8.02(A)(iv) which addresses TPH standards.

Navy Response to RIDEM Comment No. 3: Table 3-1 was created from Table 4-5 from the FS, which presents the ARARs for Alternative S-3. Two ARARs were added to the end of this Table. Agree that the Navy can delete the ARAR for Section 3.39 from the RIDEM Remediation Regulations. Regarding the "recreational" land use issue at Site 16, please note that Site 16 is **fundamentally** an area that has been used in the past and will be used in the future for industrial/commercial purposes. The immediate Bldg E-107 marina area is only a small portion of Site 16; use is currently restricted to marina use only. While the Navy appreciates the RIDEM concern to assure that "unrestricted" recreational use does not occur in this area, continuing discussions regarding the "appropriate" RIDEM ARARs/definition for this particular area are not warranted given the fundamental nature and use of the area, use restrictions already in place, LUCs that will be added per the Feasibility Study and Proposed Plan documents, and the agreements reached by the BCT to remediate the area

Disagree with the addition of Section 8.02(A)(vi) with addresses TPH standards because TPH is not covered under CERCLA.

RIDEM Comment – From RIDEM's perspective the recreational use at the marina property is unrestricted and therefore any recreational activity could occur on this property under the RIDEM Remediation Regulations, Amended 2011. Limiting the property to marina use is an issue that will be addressed as part of the MARAD transfer. Otherwise the Navy response to this comment is acceptable noting that TPH will be addressed under separate correspondence.

4. Table 3-3, Federal and State Action Specific ARARs – Alternative S-3A - Please add the following RIDEM Office of Waste Management Solid Waste Regulation No. 2 Citations: Section 2.1.08(c)(1)(i)(B). This portion of the regulation addresses minimum number of upgradient and downgradient monitoring wells and Sections 2.1.08(c)(1)(i)(C) & (D). These regulations govern where downgradient monitoring wells can be located in relation to a waste management unit.

Navy Response to RIDEM Comment No. 4: Agree. These three subsections will be added to the list of ARARs.

RIDEM Comment – Navy response is acceptable.

5. Page 3-4, Section 3.1.2, Detailed Analysis, Alternative S-3A, Short-Term Effectiveness, Paragraph 4, Last Sentence - Based on the Navy response to Comment 1 perhaps the reference to the manufacture of steel used in sheet piles for shoring could be eliminated since a two foot deep excavation is unlikely to require shoring.

Navy Response to RIDEM Comment No. 5: The comment refers to the summary of the sustainability discussion. The Navy is not proposing to delete the reference to the potential use of shoring, so the subject text will not be revised.

RIDEM Comment – Navy response is acceptable.

6. Page 3-5, Section 3.1.2, Detailed Analysis, Alternative S-3A, Implementability, Paragraph 2, Sentence 2 – This sentence states that LUCs would be incorporated into the Land Use Control Implementation Plan (LUCIP). Please clarify that LUCs (institutional controls) would result in an environmental land use restriction (ELUR) recorded on the property's deed as described in Section 8.09 of the RIDEM Remediation Regulations, as Amended November 2011.

Navy Response to RIDEM Comment No. 6: Details regarding the establishment and enforcement of the LUCs will be developed in the LUC Remedial Design; the actual mechanisms/tools used to apply/implement the LUCs are not included in the FSA. This approach will allow the Navy the flexibility needed to determine "how" to best apply/implement the LUCs. Specification of the actual instruments/mechanisms to be used (at this time) may unnecessarily constrain or complicate the process.

RIDEM Comment – Since it is fairly certain that residential use will not be allowed on this property please explain how the Navy will implement this restriction if it is not done through an ELUR. All that RIDEM is asking is if the Navy is going to place an ELUR that it be done in accordance with Section 8.09 of the RIDEM Remediation Regulations, Amended 2011. If it is not going to be accomplished this way then please explain some of the other possibilities for accomplishing the same goal.

7. Page 3-7, Section 3.2.1, Groundwater Alternative G-3B, Description, Component 2: Monitored Natural Attenuation, Paragraph 1 – This paragraph states that because of the low frequency of detection and low concentrations that arsenic and naphthalene would not be included in the monitoring program. Since they are COCs they need to be included in the monitoring program. If after an agreed upon number of sampling rounds that these COCs do not exceed PRGs then the parties can discuss discontinuing monitoring for said COCs. RIDEM concurs that iron and manganese need not be considered in the long-term monitoring program as these constituents are considered nutrients.

Navy Response to RIDEM Comment No. 7: As noted on Page 3-6, this component is nearly identical to the same component (MNA) described for Alternative G-2 in the FS. While the Navy does not necessarily disagree with the addition of arsenic and naphthalene, specifics of the LTM program will be worked out later in the remedial design process.

RIDEM Comment – Provided that COCs can be added or deleted during the design phase of the Long-Term Monitoring Program the Navy response is acceptable.

8. Page 3-7, Section 3.2.1, Groundwater Alternative G-3B, Component 3: LUCs, Paragraph 1 – Similar to Comment 6, RIDEM is concerned that the LUC will result in an ELUR on the property in accordance with Section 8.09 of the RIDEM Remediation Regulations, as Amended November 2011. Also of concern to RIDEM is that Site 16 be used for industrial/commercial purposes with the exception of the marina which is to be used for recreational purposes and that this information is described in the ELUR. The requirement that this property be used specifically for port related activities is an issue that is of concern to the Navy, Maritime Administration and QDC and should be described separate from the ELUR.

Navy Response to RIDEM Comment No. 8: Please see Navy response to RIDEM Comment No. 6.

RIDEM Comment – See RIDEM Comment on Navy response to Comment 6.

9. Page 3-8, Section 3.2.1, Groundwater Alternative G-3B, Component 3: LUCs, Paragraph 3 – “Thus, the additional LUC would be applied to areas where VOC-contaminated shallow groundwater is present, and wherever vapor intrusion could be a potential pathway. This is assumed to be coincidental with the area where groundwater use is prohibited.” With respect to building construction the first sentence implies that there will be areas where there will be no restriction on building construction methods. For the second sentence, RIDEM was under the impression that groundwater use was to be restricted over the entire site. If groundwater use is to be restricted over the entire site then building construction methods will also be restricted over the entire site. Please confirm whether groundwater use will be restricted over the entire site and revise this paragraph as appropriate.

Navy Response to RIDEM Comment No. 9: As noted on Page 3-7, this component is nearly identical to the same component (LUCs) described for Alternative G-2 in the FS. RIDEM is correct that a LUC restricting groundwater use will likely be applied over the entire Site 16 boundary (all three parcels of land). It is also likely Parcel 7 in its entirety will have a LUC restricting groundwater use, based on upgradient conditions and other IR sites within the parcel.

RIDEM is correct that it is likely there will also be LUCs related to building construction to mitigate the potential for VI applied to all three parcels of land. This LUC would require an evaluation, and possibly require mitigation techniques be implemented. It is possible that for specific areas within each parcel that an evaluation conducted by future owners would determine actual mitigation

techniques are not necessary based on plume conditions. Because this text was accepted, no revisions will be made to the FSA.

RIDEM Comment – RIDEM is not asking the Navy to change the text in the FS, only the FSA. Please revise as appropriate.

10. Page 3-10, Section 3.2.1, Groundwater Alternative G-3B, Component 4: Contingency Remedy – Please note that any monitoring frequencies presented in the FSA are for estimating purposes and will be finalized during the remedial design.

***Navy Response to RIDEM Comment No. 10:** Agree that the number of wells and sampling frequency are for estimating purposes only; this will be noted in the text. Note that the subject text was taken from the description of the treatment component for Alternative G-4 in the FS.*

RIDEM Comment – Navy response is acceptable.

11. Table 3-1, Chemical Specific ARARs Soil– Please include RIDEM Remediation Regulations (DEM-DSR-01-93) Sections 8.01 Remedial Objectives which are more stringent than USEPA criteria, Section 8.08 (A) and (B) Points of Compliance for Soils and Groundwater, respectively, Section 8.10 Compliance Sampling and Section 9.02 Remedial Objectives which address groundwater, surface water, sediment, soil and air remedial objectives.

***Navy Response to RIDEM Comment No. 11:** A final response to this comment will be provided post the planned “ARARs” teleconference scheduled for late July 2013. The following preliminary responses are provided for discussion purposes.*

Table 3-1 was created from Table 4-5 from the FS, which are the ARARs for Alternative S-3. The Navy has proceeded with the development of the FS on the assumption that when comments are provided, they are comprehensive, complete, and address all concerns as presented at the time. Reaching this point in the CERCLA process and having new comments causes significant delay by requiring significant rework, re-assessment of previous positions, creates confusion, and substantially undermines our ability to implement a timely remedy to the benefit of the community.

Section 8.01 Remedial Objectives was not included because the values in Section 8.02 are being used. There are several instances where RIDEM values in the tables in Section 8.02 do not meet the requirements of Section 8.01. For example, per Table 6-50 of the RI, the RIDEM criterion for arsenic in soil is 7 mg/kg, but the criterion based on 10-6 is 3 mg/kg. Similarly, per Table 6-51 of the RI, the RIDEM GA criteria for benzene and vinyl chloride are 5 ug/L and 2 ug/L, respectively. But the criteria based on 10-6 are 1.1 ug/L and 0.09 ug/L, respectively.

Section 8.08(A) and (B) Points of Compliance for Soils and groundwater were not included because media-specific PRGs are to be met as part of the remediation process. The extent of the remediation is described in the FS and FSA. Therefore, the general description of points of compliance in this section does not provide any additional protection that is not already included in the alternatives.

Section 8.10 Compliance Sampling does not need to be included because post-remediation sampling and long-term monitoring will be developed as part on the Remedial Design.

Section 9.02 Remedial Objectives is not included because it is part of Section 9.00 Remedial Action Work Plan which is an administrative section. In any case, remedial objectives have already been described by the PRGs in the FS.

RIDEM Comment – The consideration of ARARs is an on-going process through the signing of the ROD. The development of new alternatives necessitates the re-consideration of ARARs. It would be a disservice to the community not to consider this important step. RIDEM therefore does not understand why the Navy seems to object to the consideration of ARARs for the new alternatives considered in the Feasibility Study Addendum, especially since they were derived from numerous discussions between the Navy, USEPA and RIDEM. As noted in the Navy response, the disposition of ARARs will come from the teleconference call which is to be scheduled sometime in late July.

12. Table 3-2, Location Specific ARARs Soil - Please include RIDEM Remediation Regulations (DEM-DSR-01-93) Section 8.09 Institutional Controls as this describes how ELURs are to be prepared and administered.

Navy Response to RIDEM Comment No. 12: A final response to this comment will be provided post the planned "ARARs" teleconference scheduled for late July 2013. The following preliminary responses are provided for discussion purposes.

RIDEM Comment – See RIDEM comment to Navy response for Comment 11.

13. Table 3-4, Chemical Specific ARARs Groundwater – Please include RIDEM Remediation regulations (DEM-DSR-01-93) Section 9.02 (A) groundwater Objectives requires a remedial objective for substances which have actual or potential impacts on groundwater.

Navy Response to RIDEM Comment No. 13: A final response to this comment will be provided post the planned "ARARs" teleconference scheduled for late July 2013. The following preliminary responses are provided for discussion purposes.

Table 3-4 was created from Table 4-24 from the FS, which are the ARARs for Alternative G-3A. Per the response to Comment No. 11, Section 9.02(A) Remedial

Objectives is not included because it is part of Section 9.0 Remedial Action Work Plan which is an administrative section. In any case, remedial objectives have already been described by the PRGs in the FS.

RIDEM Comment – See RIDEM comment to Navy response for Comment 11.

14. Page 4-3, Section 4.2.1, Marina Soil Remediation, Description of Component, Paragraph 2 - See Comment 1 as it not clear that shoring would be required for a two foot deep excavation.

Navy Response to RIDEM Comment No. 14: Please see the response to Comment No. 1.

RIDEM Comment – Response is acceptable.

15. Page 5-4, Section 5.1.5, Short-Term Effectiveness Soil, Paragraph 2, Sentence 4 – Please explain for Alternative S-3A how exposure to remaining contaminants that may leach from the soil into the groundwater would be addressed by the WMA. As long as the leached contaminants remain under the WMA they would not be addressed, i.e. meet PRGs, and if they migrate beyond the WMA then they would need to be addressed.

Navy Response to Comment No. 15: Comment acknowledged. Agree that contaminant concentrations beneath the WMA can be greater than PRGs. Contaminants (i.e., the VOCs) that may migrate beyond the WMA at unacceptable concentrations and pose unacceptable risk will be addressed by the contingency remedy. This has been explained elsewhere in the FSA in the discussions of the groundwater alternatives.

RIDEM Comment – Navy response is acceptable.

16. Comments on the Proposed Plan have been previously provided to the Navy on 26 March 2013.

Navy Response to Comment No. 16: Comment acknowledged.

RIDEM Comment – Navy response is acceptable.

RIDEM would like to thank you for the opportunity to comment on this document and looks forward to working with the Navy and USEPA. If you have any questions or require additional information please call me at (401) 222-2797 ext. 7138 or email me at richard.gottlieb@dem.ri.gov.

Sincerely,

A handwritten signature in black ink, appearing to be 'Richard Gottlieb', written in a cursive style.

Richard Gottlieb, P.E.

Cc: M. Destefano, DEM OWM
C. Williams, EPA Region 1
D. Barney, BRAC Environmental Coordinator
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